

Amendments to the Specification

Please replace the paragraph that begins on Page 1, line 9 and carries over to Page 2, line 12 with the following marked-up replacement paragraph:

— The tasks executed in real-time systems tend to be highly predictable in terms of their execution characteristics (which are also known as “release characteristics”). In particular, the execution patterns of tasks in real-time systems that are based upon a task model referred to as the “periodic task model” are predictable in terms of two values, their period and their cost. The period of a task is an interval of time that represents the natural frequency of execution for the task. The cost for a task is also an interval of time, and represents the maximum time it takes the task to complete its required work in a single period. For example, one task may execute once every five days, but only execute for 2 minutes within this five-day period; the period for this task is therefore 5 days while its cost is 2 minutes. Another task in the same system may execute once in every 10-millisecond interval, and have a cost of 10 microseconds. ~~[[Each]]~~ In the general case, each period (except the first) begins immediately at the end of the previous period. The semantically correct execution pattern is that an instance of a task becomes ready to run at the beginning of every period and must complete its work sometime before the end of the period in which it is invoked. The end of the period for a task invocation is called the deadline. —